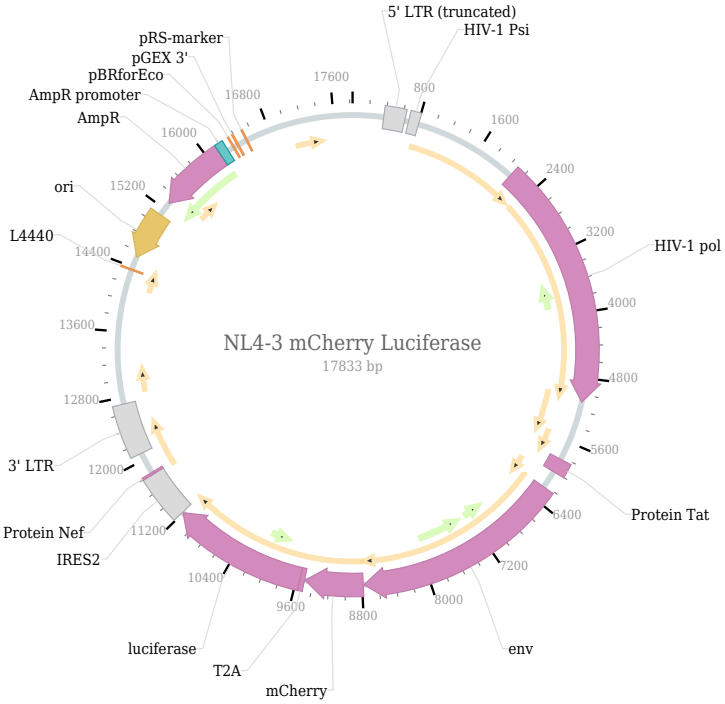
NL4-3 mCherry Luciferase

Vector ID	V000994
Antibiotic Resistance	Ampicillin
Length	17833 bp
Vector Type	Lentiviral

Product Information

Replication Origin	ori
Selection Marker	mCherry, Luciferase
Promoter	EF-1 alpha– driven mCherry:Puromycin
Cloning Method	Restriction Enzyme
5' Primer	from pNLENG1 5'
3' Primer	from pNLENG1 3'
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The NL4 - 3 mCherry Luciferase vector is an important tool for studying HIV - 1 latency. It combines mCherry and Luciferase genes connected by a T2A ribosomal skip sequence. Under the same LTR - driven mRNA, they are expressed as separate proteins with Nef under an IRES element. This dual reporter gene system allows simultaneous monitoring of activated cell number (mCherry) and reactivation strength (Luciferase). It accurately reflects HIV - 1 states, providing a comprehensive perspective for latency mechanism study. Its advantages include comprehensive information acquisition, rapid latency establishment and reactivation detection in primary CD4 T cells and different subsets, and broad application prospects for evaluating activator effects and studying subset differences, supporting HIV latency research and treatment strategy development.

Vector Map



Plasmid Resuspension Protocol

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 μl for 5 μg plasmid, and 100 μl for 100 μg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.